CLAIMS:

1. A gas cleaning device comprising a gas inlet, a gas outlet and a path of fluid communication between the gas inlet and gas outlet, a filter in the path of fluid communication and ionising means, which ionising means is at least partly within the filter.

2. A gas cleaning device according to claim 1, in which the ionising means is partly within and partly outside the filter.

3. A gas cleaning device according to claim 2, in which the major part of the ionising means is within the filter.

4. A gas cleaning device according to claim 2 or claim 3, in which the ionising means is mounted externally of the filter.

5. A gas cleaning device according to claim 4, in which the ionising means comprises a first end and a second end is mounted at the first end only.

6. A gas cleaning device according to any preceding claim, in which the filter comprises a hollow tube into which the ionising means projects.

7. A gas cleaning device according to any preceding claim, in which the ionising means comprises an electrode.

8. A gas cleaning device according to claim 7, in which the electrode comprises an elongate filament.

9. A gas cleaning device according to any preceding claim, in which the filter comprises a filter opening the leading edge of which is returned.

10. A gas cleaning device according to any preceding claim, in which the device further comprises an exit tube at least partly in the filter.

11. A gas cleaning device according to claim 10, in which the entrance to the exit tube comprises an external truncated cone.

12. A gas cleaning device according to any preceding claim, in which the path of fluid communication comprises a first path through the filter and a second path avoiding the filter.

13. A gas cleaning device according to claim 12, in which the second path is through the exit tube opening.

14. A gas cleaning device according to any preceding claim, in which a return hole is provided in the exit tube for the first flow path to join the second flow path.

15. A gas cleaning device according to claim 15, in which the hole is small relative to the cross-sectional area of the exit tube.

16. A gas cleaning device according to any preceding claim, in which the filter comprises an electrically conductive layer adjacent a filtration layer.

17. A gas cleaning device according to claim 16, in which the conductive layer is to the interior of the filtration layer.

18. A gas cleaning device according to claim 16 or claim 17, in which the conductive layer comprises a gas permeable layer.

19. A gas cleaning device according to any one of claims 16 to 18, in which the conductive layer comprises a metallic layer.

20. A gas cleaning device according to any one of claims 16 to 19, in which the conductive layer is connected to a power supply, whereby the conductive layer can be electrically heated.

21. A gas cleaning device according to any one of claims 16 to 20, in which the conductive layer is at least partly coated in a less conductive layer.

22. A vehicle comprising a vehicle exhaust with an exhaust gas flow path and a gas cleaning device according to any preceding claim in the exhaust gas flow path.